

## *Angle's Classification of Malocclusion*

### ***Procedure & Method Information***

*Name of Procedure/Method* Angle's Classification of Malocclusion

*Abbreviation* None

*Purpose* To categorize malocclusion.

*Year of Establishment* 1899

*Type of Procedure/Method*

*Developer(s)* E.H. Angle

*Oral Condition Category*

### ***Background Information***

*Background Information* In 1899, the Angle's Classification of Malocclusion was developed by E.H. Angle, a very influential and innovative contributor to the field of orthodontics. It was the first simple and logical classification system for malocclusion and is still used as the basis for orthodontic diagnosis (Travers, 1994). It is considered to be useful for treatment planning but not for epidemiological surveys due to its nominal categorization (Burt and Eklund, 1999).

*Changes Over Time* None

### ***Procedure Method***

*Procedure Method*

Angle's Classification of Malocclusion

#### Class I

Relative position of the dental arches, mesio-distally, normal, with malocclusions usually confined to the anterior teeth. First molars usually in normal occlusion, although one or more may be in lingual or buccal occlusion. Cases belonging to this class far exceed in number those of all other classes combined.

#### Class II

Retrusion of the lower jaw, with distal occlusion of the lower teeth.

#### Division I

a. Narrow upper arch, with lengthened and prominent upper incisors; lack of nasal and lip function.

Mouth-breathers.

b. Same as a., but with only one lateral half of the arch involved, the other being normal. Mouth-

breathers.

#### Division II

- a. Slight narrowing of the upper arch; bunching of the upper incisors, with overlapping and lingual inclinations; normal lip and nasal function.
- b. Same as a., but with only one lateral half of the arch involved, the other being normal; normal lip and mouth function.

#### Class III

- a. Protrusion of the lower jaw, with mesial occlusion of the lower teeth; lower incisors and cuspids inclined lingually.
- b. Same as a., but with only one lateral half of the arch involved, the other being normal.

Source: Angle EH. Classification of malocclusion. Dent Cosmos 1899;41:248-64.

#### *Established Modifications*

None

#### *Federal Survey Modifications*

None

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### ***References***

#### *References*

Textbooks, Manuals, and the Internet:

Burt BA, Eklund SA. Dentistry, Dental Practice, and the Community, 5th edition. Philadelphia: W.B. Saunders Company, 1999.

Travers B (ed). World of Invention. Farmington Hills: Gale, 1994. Retrieved October 3, 2001, from the World Wide Web: <http://www.smiledoc.com/dentist/denhis.html>.

Journals:

Angle EH. Classification of malocclusion. Dent Cosmos 1899;41:248-64.

Tang EL, Wei SH. Recording and measuring malocclusion: a review of the literature. Am J Orthod Dentofacial Orthop. 1993 Apr;103(4):344-51.

#### *Validity*

#### *Reliability*

Du SQ, Rinchuse DJ, Zullo TG, Rinchuse DJ. Reliability of three methods of occlusion classification. Am J Orthod Dentofacial Orthop. 1998 Apr;113(4):463-70.

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### ***Listing of Publications with Surveys &***

International Surveys & Studies:

Al Yami EA, Kuijpers-Jagtman AM, van 't Hof MA. Assessment of biological changes in a nonorthodontic sample using the PAR index. *Am J Orthod Dentofacial Orthop*. 1998 Aug;114(2):224-8.

Charron C. [Prognostic factors of treatment results through diagnostic and therapeutic elements]. *Orthod Fr*. 1991;62 Pt 2:535-48. [Article in French]

Espona IG, Gomez JT, Carmona JB. Cluster analysis application to Class I malocclusion. *Eur J Orthod*. 1995 Jun;17(3):231-40.

Franklin DL, Luther F, Curzon ME. The prevalence of malocclusion in children with cerebral palsy. *Eur J Orthod*. 1996 Dec;18(6):637-43.

Sonnesen L, Bakke M, Solow B. Malocclusion traits and symptoms and signs of temporomandibular disorders in children with severe malocclusion. *Eur J Orthod*. 1998 Oct;20(5):543-59.

Utt TW, Meyers CE Jr, Wierzbica TF, Hondrum SO. A three-dimensional comparison of condylar position changes between centric relation and centric occlusion using the mandibular position indicator. *Am J Orthod Dentofacial Orthop*. 1995 Mar;107(3):298-308.

United States Surveys & Studies:

Tipton RT, Rinchuse DJ. The relationship between static occlusion and functional occlusion in a dental school population. *Angle Orthod*. 1991 Spring;61(1):57-66.